

LEAVITT'S FOREST TREES OF NEW ENGLAND.¹—This little volume, attractive in flexible red Turkey morocco bind, bearing the seal of Harvard University and published by the Arnold Arboretum, is put forth in the hope that it may both stimulate and to the extent of its very limited scope satisfy curiosity regarding the nature and general significance of trees. While the author states (p. 3) that the book is meant to give to visitors interesting and valuable information about the native trees, the work is neither in any ordinary sense a guide to the plantations of the Arboretum, nor is its purpose, as its title might suggest, a taxonomic presentation of the trees of New England with keys and taxonomic diagnoses.

Its chapters, more than 50 in number, are for the most part little popular essays on subjects connected with tree-life as, for instance, a brief account of the origin and development of the Arnold Arboretum, a sketch of the woods of 1620 embodying some historic data and inferred generalization regarding the trees found by the early settlers, a comparison of the forests of the northeastern parts of our continent with those of the Sierra Nevada and of the Pacific Slope, a brief apology for Latin nomenclature, a simple explanation of the grouping of trees in families and genera, resin and its significance, *Mycorrhiza* and its biological importance.

There follow some chapters or paragraphs dealing in popular style with the leading plant families as illustrated by their most common arboreal elements. Attention is then drawn to the structure and physiological functions of the leaf, the nature of protoplasm, of sap, bark, wood, plant disease, etc.

A chapter on tree geography presents, with the aid of outline maps, some of the leading points in tree distribution.

All these subjects are handled with manifest effort to free them from technicality and even, at times, to present them with a measure of humor, as when the author heads one of his chapters, "What Makes the Elm Tree so Different from the Bull Dog?"

At the end of the little book some 30 pages are devoted to brief, untechnical descriptions of the more important trees of New England, each being illustrated by a half-tone figure of a typical leaf. Naturally certain intricate groups like the willows and hawthorns are passed with mere mention.

The work is obviously intended not for the botanist, but for the layman, and there can be no doubt that it contains for him much that would not previously have come to his knowledge or attention and which would tend to put him into a more observing frame of mind and better touch with nature.—B. L. ROBINSON

TWO SEGREGATES IN SPOROBOLUS.—The annual species of *Sporobolus*, often known as Poverty Grass, because of their occurrence in thin and dry soils, are currently treated as *S. vaginaeflorus* (Torr.) Wood, with comparatively long spikelets with pubescent lemmas, and *S.*

¹ Robert Greenleaf Leavitt, "Forest Trees of New England." 8 vo. 180 pages and 78 text figures. Boston, Dec. 21, 1932. \$1.75.

neglectus Nash, with smaller spikelets and glabrous lemmas, *S. neglectus* occurring, at least in New England, chiefly in calcareous areas. The removal of *S. neglectus* has greatly clarified the group, but *S. vaginaeflorus*, as currently treated, consists of two well-marked varieties, while a plant of the Ozark Plateau with spikelets as long as in *S. vaginaeflorus* has the lemmas quite glabrous. My understanding of this group is briefly expressed in the following key.

- Spikelets 3.5–6.5 mm. long; grain 1.7–2.2 mm. long.
 Lemma pubescent; leaves glabrous or essentially so.
 Palea and lemma subequal, about equaled by the glumes. *S. vaginaeflorus*.
 Palea prolonged far above the glumes and lemma into a slender beak. *S. vaginaeflorus*, var. *inaequalis*.
 Lemma glabrous; leaves (especially the lower) papillose-pilose. *S. ozarkanus*.
 Spikelets 2–3 mm. long; lemmas glabrous; grain 1–1.5 mm. long. *S. neglectus*.

S. VAGINAEFLORUS (Torr.) Wood, var. **inaequalis**, var. nov., a forma typica recedit palea prolongata glumas lemmaque valde superantibus.—Central Maine to southern Ontario, south to Long Island, Wisconsin and Iowa. TYPE: Concord, New Hampshire, September 9, 1901, *F. W. Batchelder*, in Gray Herb.

In New England, at least, var. *inaequalis* is the northern extreme of the species. The northernmost New England specimens seen of typical *S. vaginaeflorus* are from North Berwick, Maine, Exeter, New Hampshire and Willoughby, Vermont. All material seen from farther north in Maine and New Hampshire is var. *inaequalis*: in Maine at Milo (165 miles northeast of North Berwick), Orono and Litchfield; in New Hampshire at Shelburne (100 miles north of Exeter), Concord and Charlestown. The variety extends south through western New England, reaching Long Island (East Williston, September 21, 1899, *J. R. Churchill*).

S. ozarkanus, sp. nov. Planta annua *S. vaginaefloro* similis; foliis imis valde papilloso-pilosis; lemmatibus glabris.—MISSOURI: barrens, Webb City, September 8, 1910, *E. J. Palmer*, nos. 3133 (TYPE in Gray Herb.), 3133A; both distributed as *S. pilosus* Vasey.

S. ozarkanus, in its long spikelets, narrow lemma and strongly ciliate sheath-orifices is like typical *S. vaginaeflorus*; but its quite glabrous lemmas and strongly pubescent leaves quickly set it apart. It is, apparently, another of the many endemic species of the Ozark region. *S. pilosus*, to which *S. ozarkanus* was originally referred, is a strong perennial, so closely related to *S. asper* (Michx.) Kunth that

it has been referred by Hitchcock to that species as *S. asper pilosus* (Vasey) Hitchc. Proc. Biol. Soc. Wash. xli. 161 (1928).—M. L. FERNALD, GRAY HERBARIUM.

SOME SYNONYMY.—*SOLANUM ELAEAGNIFOLIUM*, f. *ALBIFLORUM* Cockerell, Bull. Torrey Club 20: 410. Oct., 1893. Synonym: *S. elaeagnifolium*, f. *Benkei* Standl. RHODORA 34: 176. Sept., 1932.

EUSTOMA RUSSELLIANUM, f. *ALBIFLORUM* Cockerell, Torrey Club 24: 50–51. May–June, 1924. Synonym: *E. Russellianum*, f. *Fisheri* Standl. RHODORA 34: 176. Sept., 1932.—T. D. A. COCKERELL, University of Colorado.

[A needless synonym would have been avoided if, in originally publishing *Eustoma Russellianum*, f. *albiflorum*, its author had taken the trouble to indicate it as *new* instead of “long . . . known.” The article definitely recorded as newly published “a remarkable new form (f, **flaviflorum** nov.) with clear yellow flowers”; but it gave no intimation that *f. albiflorum* was new and it left doubt as to the author’s conception of its rank: “The variety or form of *E. russellianum* with white flowers (f, *albiflorum*) has long been known.” Similarly, *Solanum elaeagnifolium*, f. *albiflorum* was published without any indication that it was new.—PAUL C. STANDLEY].

Volume 35, no. 410, including pages 41 to 68 and 4 plates, was issued 4 February, 1933.